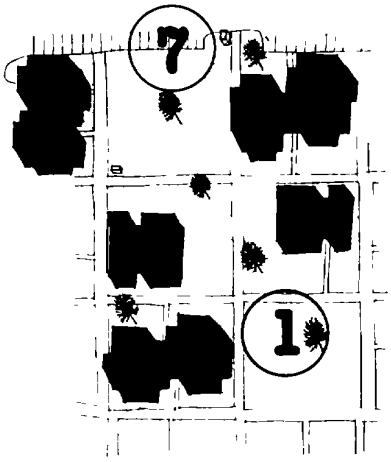
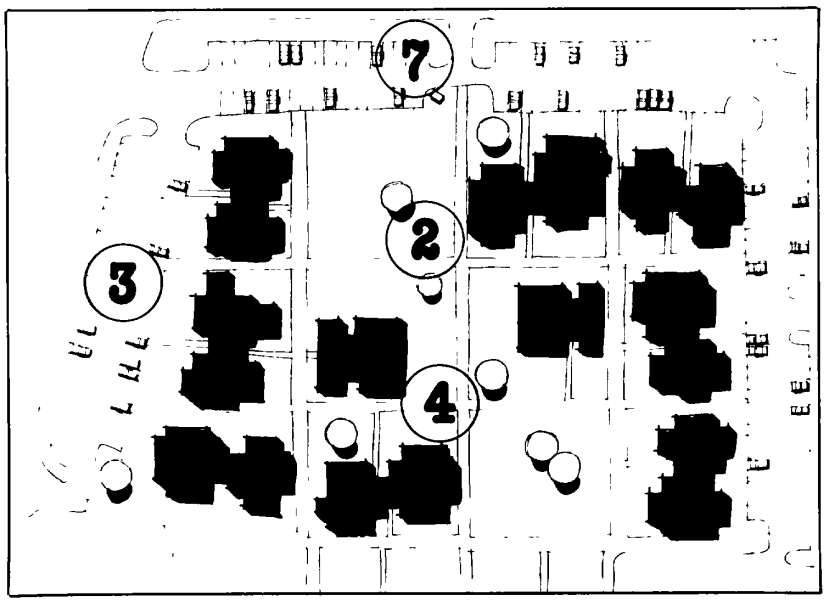
Housing.

Military installations typically contain three basic types of housing: troop housing, attached and detached family housing. Typical problems and design improvements to make them more attractive residential environments are illustrated here for each of these housing types.

Fig. 16-1: Troop Housing Problem.

Troop housing is predominantly provided by dormitory-type buildings grouped around a mess hall and open space areas. The example illustrated here is a relatively new troop housing complex composed of three-story dormitory buildings connected to a mess hall and clustered around an open space network. Typical problems here include:





1. combined with the stark building masses that results in a harsh environment lacking in human scale.

2. Haphazard planting that disregards potential visual and functional usage.

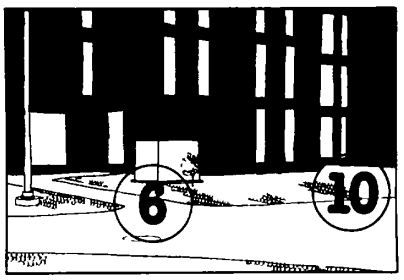
3. No screening of parking lots from adjacent roads and buildings.

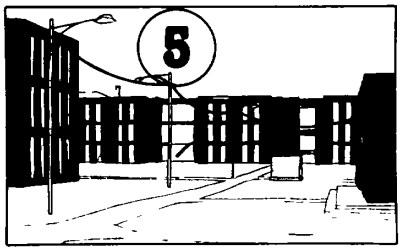
4. A regimented grid walkway system that is inefficient, does not reflect pedestrian desire lines of movement and fragments the common open space without regard to potential use.

5. Overhead utilities with attached lighting fixtures.

6. Visually prominent at-grade transformer with no screening.

7. Unscreened trash dumpster service area.





8. Lack of pedestrian amenities such as outdoor seating, drinking fountains and bus shelters.

9. No recreational amenities provided in conjunction with the open space and walkway systems.

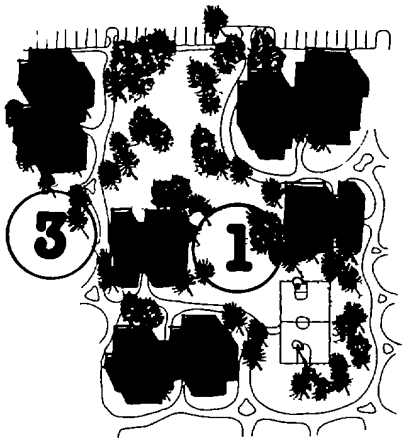
10. Grounds maintenance problem created by grass turf extending to the building line.

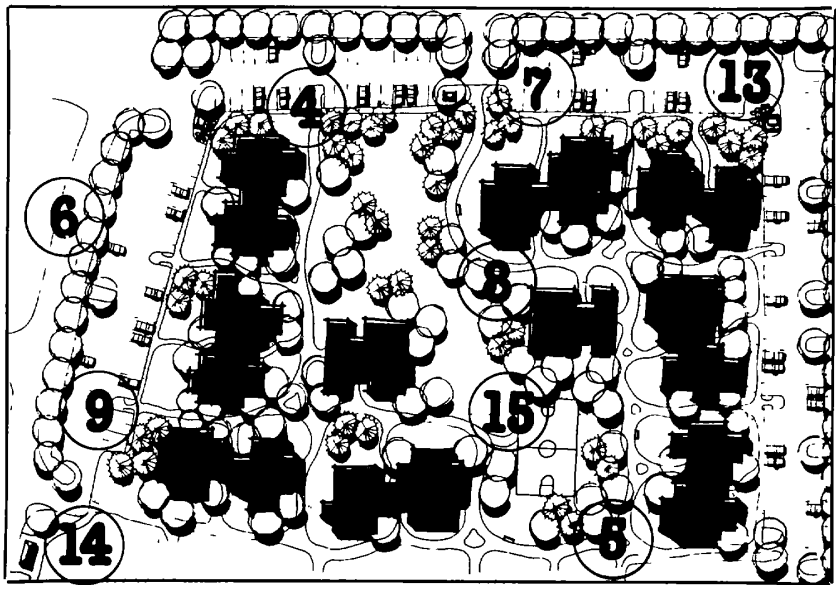
11. Lack of identificational building signing.

Fig. 16-8: Troop Housing Solution.

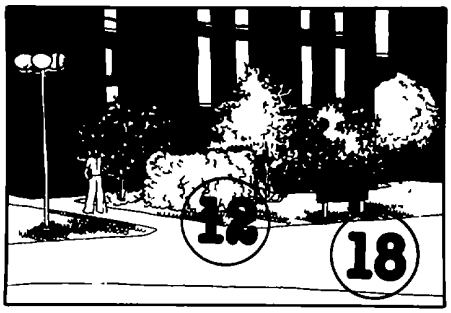
The primary design objective here is to improve the visual character and functioning of the building setting by a planting program and provision of amenities that respond to user needs. Specific improvements include:

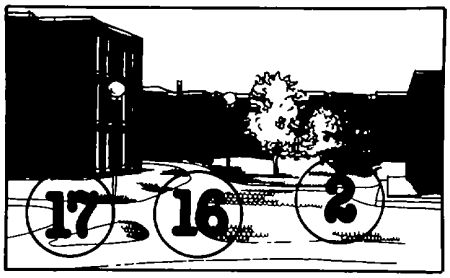
1. An extensive planting program to visually soften the stark building masses and ground plane defines the open space system and provides shade and human scale to the setting.
2. Evergreens combined with deciduous plant materials indigenous to the area to provide visual interest and winter greenery.
3. Deciduous shade trees used extensively on the south side of buildings to provide cooling summer shade and warming winter sun penetration.
4. Evergreen tree massing used extensively at the north end of the open space for wind screening of the prevailing cold winter winds.
5. Deciduous trees used extensively on the southeast end of the open space to allow cooling summer breeze penetration.
6. Planted earth berms with deciduous street trees between parking areas and the street for visual screening and shade.
7. Occasional planting islands within the parking lot relieve the monotony of large paved areas and provide shade.





8. A meandering, free-flowing walkway system reflecting the desire lines of pedestrian traffic to provide an efficient, visually interesting and convenient network that enables the open space to be varied in size according to intended use.
9. Paved finger islands extending the walkway system into the parking area at strategic locations to provide collector nodes for pedestrians.
10. Unsightly overhead utilities relocated underground.
11. Pedestrian-scaled walkway lighting whose design is compatible with the architectural setting.
12. At-grade transformers located in inconspicuous areas and screened with plant material.
13. Trash dumpster enclosure fencing of compatible design and materials with the architectural setting to screen them from view of main streets and building entrances.
14. A conveniently located bus shelter of compatible architectural character with the setting that provides protection from inclement weather conditions typical to the installation.



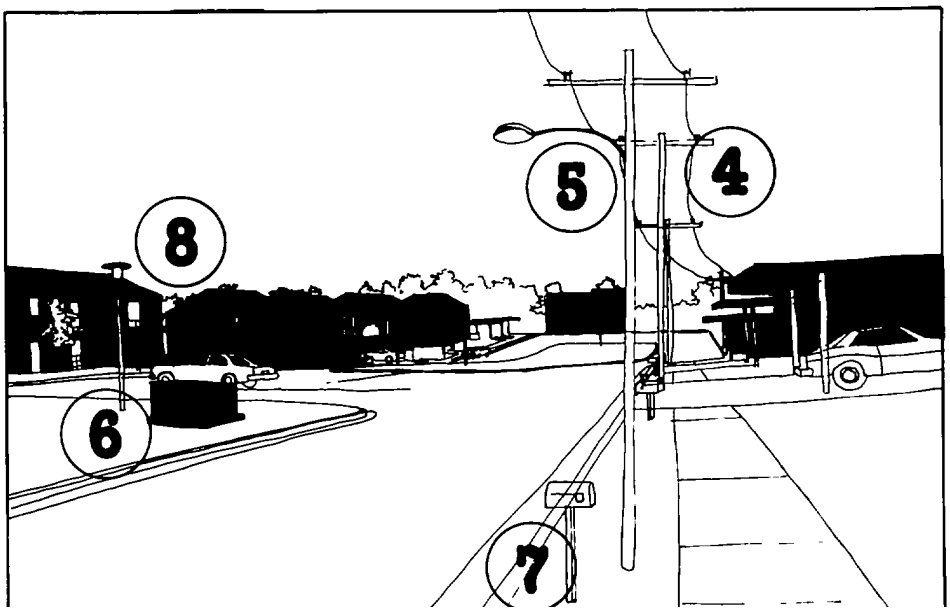


15. Outdoor recreational amenities provided as an integral part of the open space system.
16. Pedestrian amenities along the walkway such as seating areas with trash receptacles and drinking fountains.
17. Mowing strips with edging along the base of the buildings to facilitate easier maintenance of the grass lawn.
18. Identification signing at strategic decision points along the walkway network based upon a coordinated signing system.

Fig. 16-3: Attached Housing Problem.

Attached housing typically provides family housing for enlisted personnel and some officers. A cluster development pattern of attached housing can minimize development costs by reducing road lengths and utility runs, preserve usable open space and conserve sensitive natural resource areas; however, cluster development requires careful design attention to provide privacy for individual units within their relatively dense building groupings. The example illustrated here is an attached housing cluster whose success as a pleasant residential environment has fallen short of its potential, primarily due to inadequate attention to site development details. Typical problems here include:

1. A sparsity of planting that creates a visually harsh residential environment and makes housing units more susceptible to extremes in climate conditions.
2. A large parking courtyard that lacks scale and screening for parked vehicles.
3. Housing units that lack privacy, especially end units.
4. Overhead utility lines that clutter.
5. Lighting fixtures mounted to utility poles.
6. A transformer located in a visually prominent area.
7. Individual mailboxes that clutter the streetscape.



8. A lack of recreational amenities serving residents of the cluster, as exemplified by the basketball fixture mounted to the front of a carport which also detracts from the architectural character.
9. An unimaginative straight entrance road that disregards natural topographic conditions as well as the unsafe intersection.
10. Lack of walkways linking the housing cluster to the overall pedestrian circulation network of the installation.

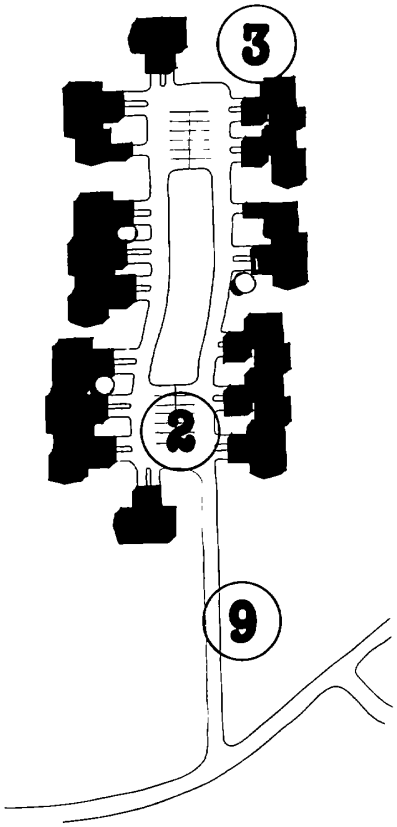
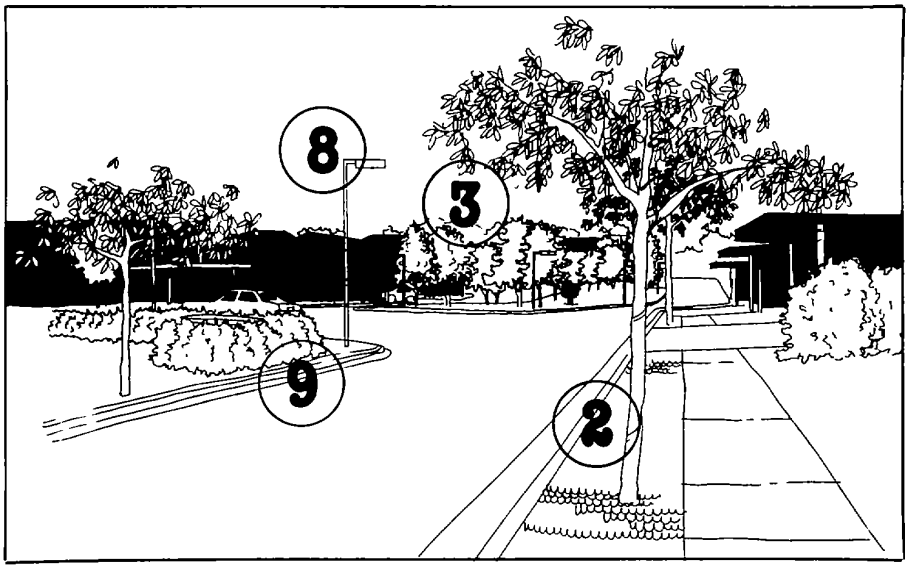


Fig 16-4: Attached Housing Solution.



Sensitive planting design provides the primary means for improving the visual appearance of the housing cluster. Specific improvements here include:

1. Shade trees in rear yards, especially along south facing units, as well as between groupings of housing units to blend units with their natural setting and beneficially modify microclimatic conditions.

2. Deciduous street trees along the edge of the parking courtyard to provide continuity to the housing cluster and buffer housing units from the parking area.

3. Informal planting in the center parking island to reduce the scale of the parking courtyard and provide

4. End parking stalls converted into planting islands to better define circulation and reduce the visual impact of the paved area.

5. Rear yard privacy fencing that is consistent in color, materials and height throughout the housing cluster.

6. Evergreen planting and tree massing to provide privacy screening for end housing units facing the entrance road.

7. Overhead utilities relocated underground.

8. Lighting fixtures whose design is compatible with the residential setting and does not produce glare into the houses.

9. Screening of at-grade transformer with evergreen shrubs.

10. Group mailboxes in the center island to reduce clutter and facilitate efficient and convenient mall distribution.

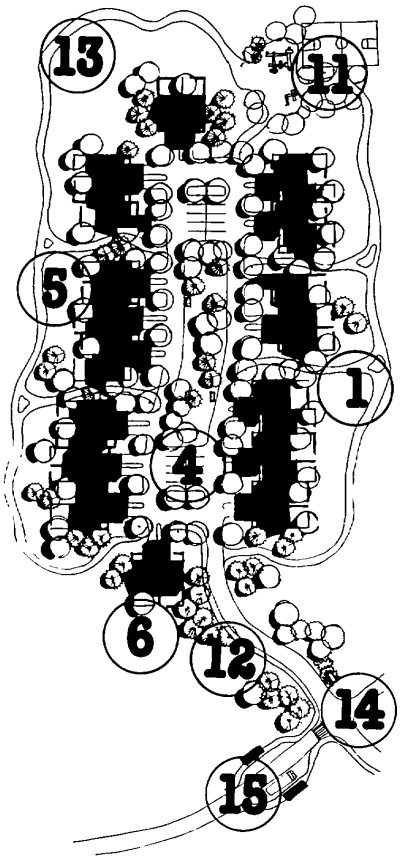
11. A convenient recreational area with facilities appropriate to resident needs.

12. Realignment of the entrance road to provide a more interesting approach that is more compatible with the natural topography and provides a safe intersection design with the entrance road to the housing cluster across the street.

13. Walkways that link the housing cluster to the recreation area, bus stop and the overall pedestrian circulation and open space systems of the installation.

14. An entrance feature with signing to identify the housing cluster.

15. A convenient bus shelter along the main road designed compatibly with the architectural character of the setting and providing protection from inclement weather conditions typical to the area.



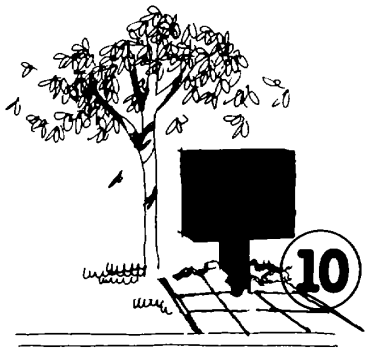
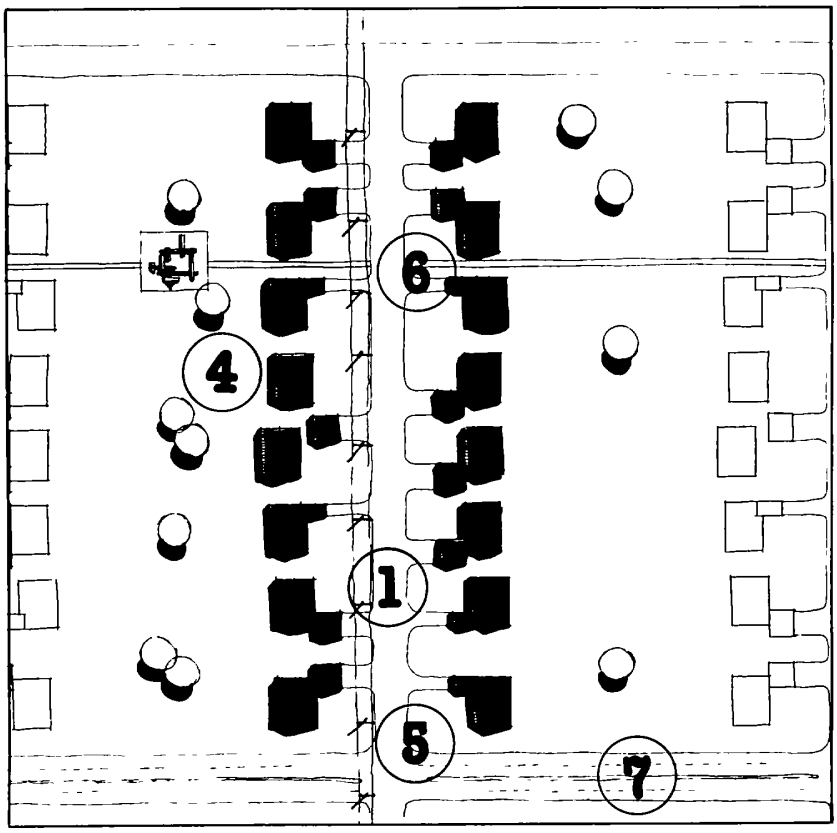
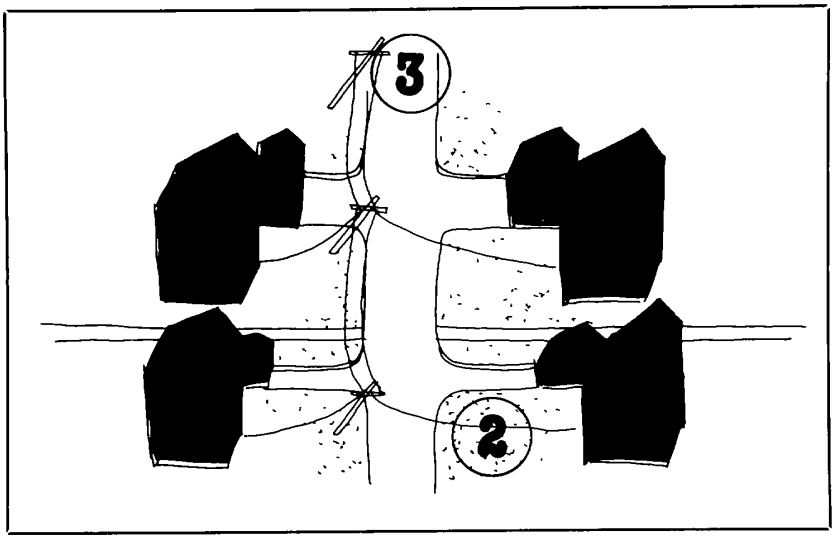


Fig. 16-5: Detached Housing Problem.



Detached single family housing on military installations typically provides family housing for higher ranking officers. There are many single family subdivision patterns found on installations, but the grid system is quite prevalent. The example Illustrated here is a single family detached housing area with a grid street system. It contains a number of common visual problems including:

1. A grid street pattern with houses of identical design and street setback that creates a monotonous residential environment.
2. A lack of planting that consequently amplifies the monotonous development pattern and stark appearance of the neighborhood.
3. Overhead utilities that clutter the streetscape.
4. Little physical definition between public and private spaces.

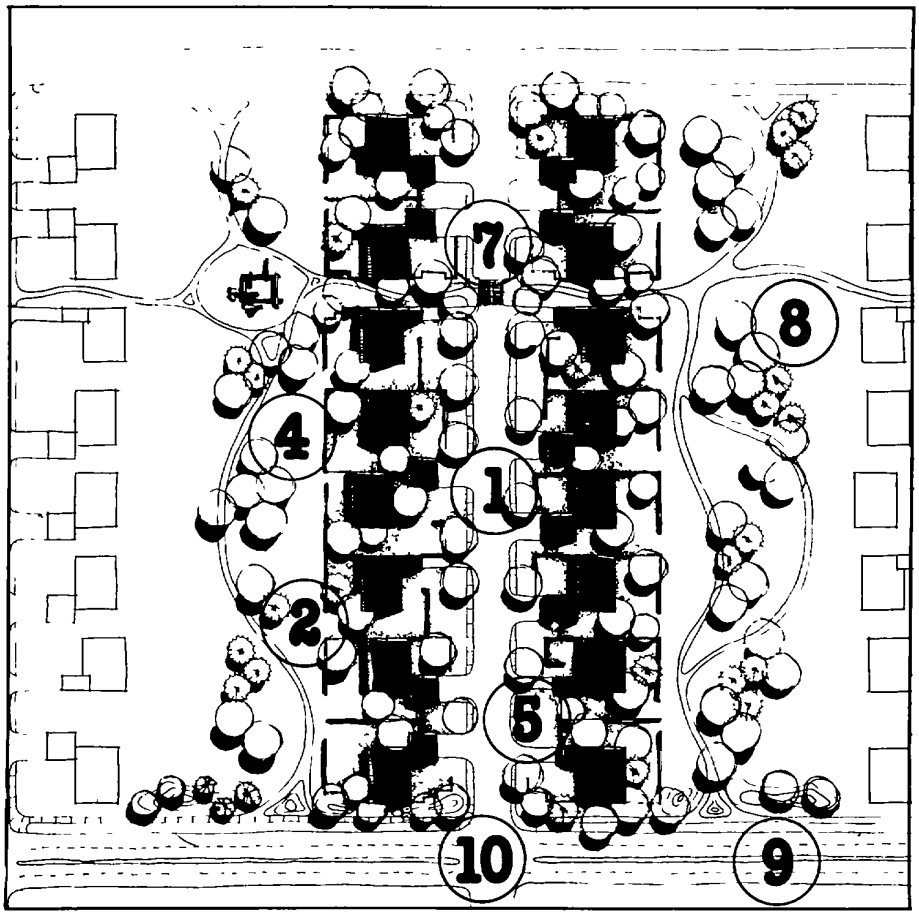


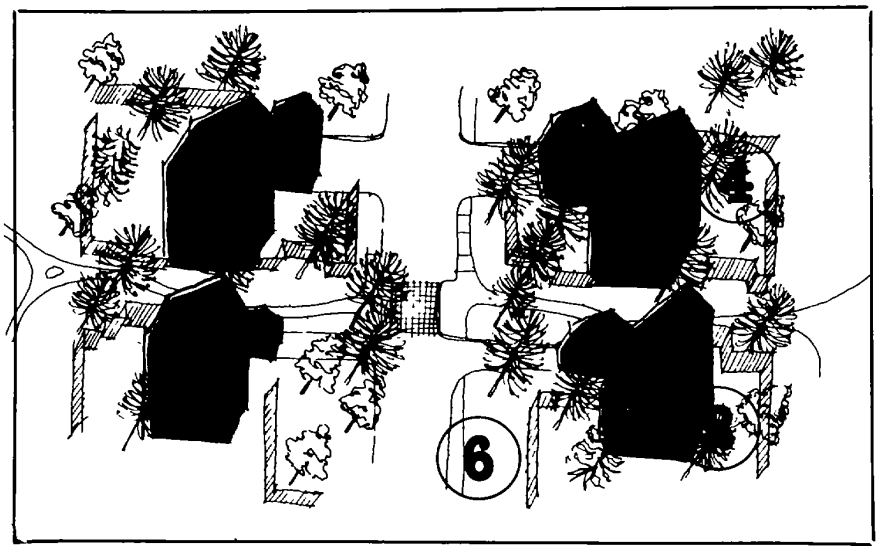
5. Unsafe pedestrian circulation within the street as a result of lack of sidewalks.
6. Pedestrian access to the neighborhood play area limited to a rigidly aligned straight walkway with an undefined midblock street crossing.
7. Obtrusive traffic noise from the adjacent arterial road.

Fig. 16-6: Detached Housing Solution.

The primary design objective here is to provide a pleasant residential environment that ameliorates the otherwise monotonous and cluttered development pattern. Specific improvements include:

1. Deciduous street trees that provide visual continuity to the streetscape.
2. Informal planting that addresses the visual and functional requirements of each housing unit while providing overall visual interest to the regimented development pattern.
3. Underground utilities that minimize streetscape clutter.
4. Privacy fencing of consistent style, materials, color and height to define the boundary between public and private areas.
5. Varied alignment of privacy fencing to provide relief from the monotonous development pattern and avoid the "alley" effect created by continuous straight line fencing.





6. Sidewalks along the street.
7. A pedestrian path system with meandering alignment within the public open space and striped warnings at midblock crossings.
8. Increased tree massing within the public open space for visual interest and shade.
9. Planted earth berm to screen views and buffer traffic noise from the adjacent arterial road.
10. Clustered planting and stepped fencing at the street intersection into the neighborhood to create an entry statement.